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TRANSMITTAL FORM			Application No.	10/716,571
IKANS	SWILL TAL FU		Filing Date	November 18, 2003
(to be used for all	correspondence aft	er initial filing)	First Named Inventor	Chang Hee Hyoung
			Art Unit	2817
			Examiner Name	Seungsook Ham
Total Number of I	Pages in This Submissio	n 10	Attomey Docket Number	51876P410
	ENCLOS	SURES (chec	k all that apply)	
Fee Transmittal	Form	Drawing(s)	)	After Allowance Communication to Group
Fee Attack	hed	Licensing-re	elated Papers	Appeal Communication to Board of Appeals and Interferences
Amendment / Re	esponse	Petition		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
After Fina Affidavits	ıl /declaration(s)	Petition to C Provisional	Convert a Application	Proprietary Information
Extension of Tim	ne Request	Power of Al Change of 0	ttorney, Revocation Correspondence Address	Status Letter
Express Abandonment Request		Terminal D	Disclaimer	Other Enclosure(s) (please identify below):
Information Disclosure Statement				return postcard; 2 cited references; copy of search
X PTO/SB/0	08	CD, Number	er of CD(s)	rerport
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Response to Mis		Remarks		
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	SIGNATURE	OF APPLICAN	NT, ATTORNEY, OR AG	ENT
Firm or	Eric S. Hyman,	Reg. No. 30,	.139	
Individual name	BLAKELY, S	OKOLOFF,	TAYLOR & ZAFN	MAN LLP
Signature		4		
Date 0 17/05				05
			ING/TRANSMISSION	
				ce on the date shown below with sufficient 450, Alexandria, VA 22313-1450.
Typed or printed na	ame Kumiko Ale	ander		
Signature	Signature DI IMM ACC			Date 2/7/05

Based on PTO/SB/21 (04-04) as modified by Blakely, Solokoff, Tsylor & Zafman (wlr) 06/04/2004. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

#### Complete if Known Application Number 10/716,571 Filing Date November 18, 2003 First Named Inventor Chang Hee Hyoung Patent fees are subject to annual revision. Examiner Name Seungsook Ham Applicant claims small entity status. See 37 CFR 1.27. 2817 51876P410 Art Unit TOTAL AMOUNT OF PAYMENT (\$) Attorney Docket No.

METHOD	METHOD OF PAYMENT (check all that apply)						
Check Credit card Money Order None Other (please identify):							
Deposit A	Deposit Account Deposit Account Number: 02-2666 Deposit Account Name: Blakely, Sokoloff, Taylor & Zafman LLP						
☐ Cha 【】 Cha	For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)  Charge fee(s) indicated below  Charge any additional fee(s) or underpayment of fee(s)  Credit any overpayments  under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.						
FEE CALCU	LATION						
Large Er	ntity	Small	Entity				
Fee	Fee	Fee	Fee	For Description	E D-:-		
Code	(\$)	Code	(\$)	Fee Description	Fee Paid		
1051	130	2051	65	Surcharge - late filing fee or oath			
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.			
2053	130	2053	130	Non-English specification			
1251	120	2251	60	Extension for reply within first month			
1252	450	2252	225	Extension for reply within second month			
1253	1,020	2253	510	Extension for reply within third month			
1254	1,590	2254	795	Extension for reply within fourth month			
1255	2,160	2255	1,080	Extension for reply within fifth month			
1401	500	2401	250	Notice of Appeal			
1402	500	2402	250	Filing a brief in support of an appeal			
1403	1,000	2403	500	Request for oral hearing			
1451	1,510	2451	1,510	-			
1460	130	2460	130	Petitions to the Commissioner			
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)			
1806	180	1806	180	•			
1809	790	1809	395	Filing a submission after final rejection (37 CFR § 1.129(a))			
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))			
Other for	ا ee (spe	cify)					
				SUBTOTAL (2)			

SUBMITTED BY Complete (if applicable)						
Name (Print/Type)	Eric S. Hyman		Registration No. (Attorney/Agent)	30,139	Telephone	(310) 207-3800
Signature		Sall			Date	2/7/05

Docket No.: 51876P410



the Application of:

CHANG HEE HYOUNG, ET AL.

Application No.: 10/716,571

Filed: November 18, 2003

For: Switched Coupler Type Digital Phase

Shifter Using Quadrature Generator

Examiner: Seungsook Ham

Art Group: 2817

### INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In accordance with the duty of disclosure, enclosed is a copy of IDS Citation Form PTO/SB/08 or PTO-1449, together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed). This IDS and IDS Citation Form are being submitted before the mailing of a first Office Action. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

It is hereby stated that no item of information contained in the Information Disclosure Statement was cited in a patent office in a counterpart application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual associated with the filing or prosecution of the subject application more than three months prior to the filing of the Information Disclosure Statement.

The references were cited in a Search Report dated November 5, 2004 (copy enclosed herewith) in a counterpart Korean application, which was forwarded to Applicant's Representative in a communication dated November 8, 2004.

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Date:	2/7/04

Respectfully submitted,

BLAKELY, SOKOLOVF, TAYLOR & ZAFMAN LLP

Eric S. Hyman, Reg. No. 30,139

12400 Wilshire Boulevard, 7th Floor Los Angeles, CA 90025 Telephone: (310) 207-3800

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Kumiko Alexander

Date

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Supportute for form 1449A/PTO

## Supplied for form 14457... STATEMENT BY APPLICANT

(use as many sheets as necessary)

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Sheet 1 of

	Complete if Known
Application Number	10/716,571
Filing Date	November 18, 2003
First Named Inventor	Chang Hee Hyoung
Art Unit	2817
Examiner Name	Seungsook Ham
Attorney Docket Number	51876P410

U.S. PATENT DOCUMENTS							
		Document Number	Publication Date		Pages Columns Lines Where		
Examiner Initials*	Cite No.1	Number - Kind Code <sup>2</sup> (if known)	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
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	FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Foreign Patent Document	0.15		Pages, Columns, Lines,	76		
Initials*		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Γ"		
		03-291008	12-20-1991	Mitsubishi Electric Corp				
		1999-006684	08-16-1999					
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Examiner	Date	
Signature	Considered	
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<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	2	of	2
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Complete if Known				
Application Number	10/716,571			
Filing Date	November 18, 2003			
First Named Inventor	Chang Hee Hyoung			
Art Unit	2817			
Examiner Name	Seungsook Ham			
Attorney Docket Number	51876P410			

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			

Examiner	Date	
Signature	Considered	

<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.



## **Information Disclosure Statement**

U.S. Patent Application Serial No. 10/716,571 Your Ref. No.: 051876.P410 Our Ref. No.: P02EC041/US/jy

Issued Date by the Korean Intellectual Property Office: November 05, 2004 Received Date from the Korean Intellectual Property Office: November 08, 2005

- Reference No.: (1) JP Laid Open No. 1991-291008
  - (2) KR Laid Open No. 1999-0066804



Switched coupler type digital phase shifter using quadrature generator

This application was preliminarily rejected pursuant to Article 63 of the Korean Patent Law based on the following reason. Should there be any opinion against this action, please file a written argument by January 5, 2005. (You can apply for 1-month extension per each case, and we do not notify you of the confirmation for such term extension.)

### [REASON]

This invention described in claims 1 to 6 can be easily invented by those skilled in the art as pointed out below. Accordingly, the above-identified patent application cannot be registered pursuant to Article 29, Paragraph 2 of the Korean Patent Law.

### [BELOW]

Claims 1 to 6 of the present invention are directed to a phase shifter. In particular, it is directed to a switched coupler-type digital phase shifter using a quadrature generator that can realize multi-bit phase shift with one phase shifter.

However, Japanese Patent Laid-Open No. 1991-291008 (Reference 1), which is published on December 20, 1991, discloses a phase shifter having a 180° coupler and an SPDT switch, which is similar to the phase shifter of the present invention. Also, Korean Patent Laid-Open No. 1999-0066804 (Reference 2), which is published on August 16, 1999, discloses a quadrature circulating apparatus for delaying a signal by 0°, 90°, 180°, and 270° with respect to a predetermined signal. Accordingly, the invention is considered to be easily invented by those skilled in the art from a combination of the cited References 1 and 2.

[Attachment]

JP Laid-Open No. 1991-291008 (Published on December 20, 1991) KR Laid-Open No. 1999-0066804 (Published on August 16, 1999)